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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/312,485	05/17/99	DEBREGEAS	P 065691/0163

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EXAMINER	
SHAREH,S	
ART UNIT	PAPER NUMBER
1619	10

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/312,485	Applicant(s) Debregeas et al
	Examiner SHAHNAM SHARAREH	Art Unit 1619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Mar 20, 2001* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-21* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

Amendment file d on March 20, 2001 has been entered. Claims 1-20 are pending

Response to Amendments

Any rejection that is not addressed in this Office Action is considered obviated.

1. Claims 1, 5, 9, 11-12 stand rejected under 35 U.S.C. 102(b) as being anticipated by WO 9704861 ("861"). Applicant's arguments with respect to this rejection have been fully considered but are not found persuasive.

Applicant argues that the '861 reference discloses solid granules which are homogenous from the center to the periphery, and that the claimed granules comprise neutral core coated with a layer containing the plant substance with a pharmaceutically acceptable excipient.

In response, Examiner states that this argument is not found persuasive, because it does not commensurate with the scope of the rejected claims. The rejected claims are not directed to any degree of homogeneity, thus, they are not limited to such characteristics. The recitation of the rejected claims are directed to granules comprising at least one plant substance, a neutral core coated with a layer of plant substance and an excipient. '861 patent discloses solid micro granules comprising a center core comprising an excipient and optionally an active agent (abstract). The center core is then coated with mixture of active ingredient such as a plant extract and a suitable excipient, *abstract, page 5 lines 20-35.* The granules of '861 has a diameter of 0.01 mm, thus, falls within the limitations of the instant particle size. '861 meets the limitations set forth in the instant claims.

2. Claims 1-2, 4-9 stand rejected under 35 U.S.C. 102(b) as being anticipated by Jacob et al US Patent 5,733,551. Applicant's arguments with respect to the rejection of claims 1-15 under 35 U.S.C. 102(b) as being anticipated by Jacob et al US Patent 5,733,551 have been found partially persuasive in view of the amendments. Accordingly, the rejection of claims 3, 10-20 is withdrawn.

With respect to the rejected claims, Applicant argues that the Jacobs discloses process of extrusion and spheronization to prepare orally absorbable spheroid containing an active ingredient, and the products obtained by his method are homogenous.

In response, Examiner states that this argument is not found persuasive, because the argument is not commensurate with the scope of the rejected claims. The rejected claims are not directed to any degree of homogeneity, thus, they are not limited to such characteristics. The recitation of the rejected claims are directed to granules comprising at least one plant substance, a neutral core coated with a layer of plant substance and an excipient. Jacob et al disclose process of preparing herbal compositions comprising selecting a herbal extract containing a plant material produced, dissolving it in an organic solvent such as an alcohol in concentrations of at least 30% weight, then moistening his natural polymers such as cellulose or lactose by the plant containing solution (see claim 1; *col. 3 lines 6-30, Example 1-2, col. 8 lines 16-59, col 9 lines 35-36).* Accordingly, Jacob's composition containing two components; an active substance component and an excipient component. Jacob further discloses adding various auxiliary compounds such as lactose, polyvinyl pyrrolidone, sorbitol or lactose, in suitable concentrations to their final product to prepare an oral herbal composition that can provide rapid or gradual

release of the active ingredient (*Col. 2 lines 59-67, col 3. lines 20-24, col. 10 lines 1-31).* Jacob discloses that the size of his particles is about 800 microns *(col 5, lines 60-63)*. Since compositions of Jacob contains all the components of instant compositions, they are inherently capable of performing functional characteristics such as controlling the release or masking the taste or odor of the plant substance (*example 3, claim 4, 11-15*). Therefore, Jacob et al meet the limitations set forth in the instant claims.

New Grounds of Rejection

Amendments to the independent and dependent claims have modified the scope of the pending claims, thus, necessitating the new grounds of rejection.

3. Claims 1-2, 4-5, 9-13, 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Cingotti US Patent 5,427,800 (IDS, filed on 2/3/99, Paper No.6).

Cingotti discloses a process of coating micro granules having dimensions between 0.1-1 millimeter (100-1000microns) with a plant extract or tincture (*example 1-2*). Cingotti specifically discloses silica crystalline powder having 210-500 microns coated with alcoholic tincture of passiflora (*col 3 lines 40-65*). Cingotti also discloses the use of other granules such as microcrystalline cellulose (*example 4, claim 1*) being coated with extract of an active ingredient (such as harpogophytum root or plassiflora) *(examples 2-3)*; as well as , the use of binders such as sorbitol powder to provided compressibility and sufficient bulk density of his granule formulations (*col 4 lines 1-30*). The coated granules of Cingotti are then dried and gauged to a predetermined size (*claims 1, 6*). Cingotti uses sorbitol or ethanol as his solvent of choice (*example 2-3*). Therefore, Cingotti meets the limitations of the instant claims.

4. Claims 3, 6-8, 14-15, 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Cingotti US Patent 5,427,800 (IDS filed on 2/3/99, Paper No. 6) and Menzi et al US Patent 6,056,949 in view of Breitenbach et al US Patent 6,120,802 (PTO-892 filed on 10/11/00).

Cingotti discloses a process of coating micro granules with a plant extract or tincture (*example 1-2*). Cingotti also discloses the use of other granules such as microcrystalline cellulose (*example 4, claim 1*) being coated with extract of an active ingredient (such as harpogophytum root or plassiflora) *(examples 2-3*). Cingotti fails to teach the use of a delaying or flavoring agent.

Menzi et al teaches spherical granules as core material (such as maltodextrin, lactose or sucrose) that are coated with an emulsion which is sprayed on the granules (*col 2, lines 6-30, example 1*). The emulsion of Menzi can comprise a sugar, plant extract, protein or combination thereof (*col 2, lines 20-25; col 2, lines 40-47*). Menzi specifically teach the use of flavorant or odorants in his coating emulsion that can contain various modified cellulose (encompassing hydroxymethylcellulose), plant extract, and/or synthetic material such as polyvinyl pyrrolidone(PVP) (*col 6, lines 50-56; col 2, lines 46-48*). Menzi also teaches water and ethanol as their solvent of choice*(col 2, line 28-30*). Menzi et al fail to teach the use of a delaying agent containing copolymers of methacrylic acid or the use of a plasticizer or binders in their formulations.

Breitenbach et al teach methods of formulating controlled release formulations of various types of pharmaceutically active agents such as herbal substances including Ginkgo biloba having multilayers of coating, (*col 5 line 65).* Breitenbach et al specifically teach the use of various conventional additives including plasticizer and binders such as hydroxypropylcellulose,

PVP, acrylic acid copolymers to formulate their multi layer compositions,*(col 9 lines 1-37).* Breitenbach et al also teaches conventional methods of coating by treating their formulation in a coating pan or fluidized bed apparatus, *(col 7 lines 29-30).* Breitenbach fails to specifically describe a core material consisting of a sugar, cellulose, lactose or a mixture thereof.

Cingotti, Menzi and Breitenbach teach methods of preparing oral dosage formulations, thus, their teachings are viewed to be in the same field of endeavor.

Although Cingotti does not teach the use of a flavorant or a delaying agent in their coating extract mixture, it would have been obvious to one of ordinary skill in the art of drug dosage forms at the time of invention to incorporate a flavorant comprising plant extract, as taught by Menzi, and further add a plasticizer, a binder and a delaying agent of choice such as methacrylic acid copolymers, as taught by Breitenbach, into Cingotti's coating mixture, and then apply the resultant coating mixture on the granules by conventional methods known in the art, to formulate a controlled release formulation of Cingotti's granules. One of ordinary skill in the art would have been motivated to do such modifications to improve the pharmacokinetics properties of Cingotti's preparations, and subsequently improves patients compliance. Finally, absence of showing a criticality, optimizing concentrations of diluents and the components of core material within a dosage form does not impart patentability becuase it is conventional and can be achieved by routine experimentation.

Conclusion

5. No claims are allowed. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh, PharmD whose telephone number is (703) 306-5400. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 5:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diana Dudash can be reached on 703-308-2328. The fax phone number for this Group is 703-308-4556. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-1235.

ss 5/25/2001

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